

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
10/537,881	06/07/2005	Carsten Heinks	NL021262	8417
24737 759	90 10/18/2006		EXAMINER	
PHILIPS INTE	ELLECTUAL PROPER	SHAH, SAMIR M		
P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510		ART UNIT	PAPER NUMBER	
			2856	
			DATE MAIL ED: 10/18/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
• ,	10/537,881	HEINKS ET AL.			
Office Action Summary	Examiner	Art Unit			
_	Samir M. Shah	2856			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timused and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status		•			
1) ⊠ Responsive to communication(s) filed on 14 Second 2a) ☐ This action is FINAL. 2b) ☒ This 3) ☐ Since this application is in condition for alloware closed in accordance with the practice under Experimental Exp	action is non-final. nce except for formal matters, pro				
Disposition of Claims	•				
4) Claim(s) 1-8 is/are pending in the application.  4a) Of the above claim(s) is/are withdray  5) Claim(s) is/are allowed.  6) Claim(s) 1-8 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or					
Application Papers					
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on <u>07 June 2005</u> is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	☐ accepted or b)☒ objected to drawing(s) be held in abeyance. See ion is required if the drawing(s) is objected to	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119		,			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal F	ate			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 9/14/2006.	6) Other:	atom rppiloditoff			

Art Unit: 2856

#### **DETAILED ACTION**

#### **Drawings**

- 1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 1 (activity monitor).
- 2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: steps (C and D), in Figure 3.
- 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Specification

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Art Unit: 2856

### Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).
- 5. The disclosure is objected to because of the following informalities:
- (a) On page 2, line 11, delete "characterised" and replace it with --characterized--.
- (b) On page 2, line 32, delete "between the processor" and replace it with --between the processor 12--.
- (c) On page 2, line 30, and page 3, line 7, delete "measurement unit" and replace it with --measurement unit 11--.
- 6. Appropriate correction is required.

Art Unit: 2856

# Claim Objections

7. Claims 1, 3-5 are objected to because of the following informalities:

- (a) As to claim 1, line 6, delete "characterised" and replace it with --characterized--.
- (b) As to claim 1, lines 7-8, delete "remove external motion effects on an entity to which the monitor is attached from the sensor signals" and replace it with --remove external motion effects, on the entity to which the monitor is attached, from the sensor signals--.
- (c) As to claim 3, line 2, delete "such external motion" and replace it with --the external motion--.
- (d) As to claim 4, line 2, delete "such external effects" and replace it with --the external motion effects--.
- (e) As to claim 4, line 3, delete "reception" and replace it with --receipt--.
- (f) As to claim 5, line 3, delete "receiving sensor signals" and replace it with --receiving the sensor signals--.
- (g) As to claim 5, line 5, delete "remove external motion effects on the entity from" and replace it with --remove external motion effects, on the entity, from--.
- (h) As to claim 6, line 1, delete "external effects" and replace it with --external motion effects--.
- (i) As to claim 7, line 1, delete "monitoring for the" and replace it with --monitoring the--.
- 8. Appropriate correction is required.

Art Unit: 2856

# Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 10. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Stone et al. (US Patent 6,280,409 B1 henceforth "Stone").
- (a) As to claims 1 and 2, Stone discloses an activity monitor/implantable devices (71a-71c) for attachment to an entity/patient, the monitor comprising:

a measurement unit including a plurality of motion sensors (76a, 76b, 76c) operable to produce respective sensor signals indicative of motion experienced thereby (figure 7; column 7, lines 7-65); and

a processor (77a, 77b, 77c) operable to receive the sensor signals from the measurement unit and to process the signals in accordance with a predetermined method (figure 7; column 7, lines 7-65),

characterized in that the processor is operable to apply a correction calculation to the sensor signals, in order to remove external motion effects (e.g. automobile driving),

on the entity/patient to which the monitor/implantable devices (71a-71c) is/are attached, from the sensor signals (figure 7; column 10, lines 61-67; column 11, lines 1-7).

Note as to claim 1, Stone teaches "a device with...an activity sensor, memory, a processor...would also be sufficient to perform the tasks required of this invention's implantable device" (column 7, lines 65-67; column 8, lines 1-2).

- (b) As to claims 5 and 6, Stone discloses a method of monitoring activity of an entity/patient using a plurality of motion sensors (76a, 76b, 76c) which are operable to produce respective sensor signals indicative of motion experienced thereby (figure 7; column 7, lines 7-65), the method comprising receiving sensor signals and processing the signals in accordance with a predetermined method (figure 7; column 7, lines 7-65), characterized by applying a correction calculation to the sensor signals in order to remove external motion effects (e.g. automobile driving) on the entity from the sensor signals (figure 7; column 10, lines 61-67; column 11, lines 1-7).
- 11. Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mault (International Application Publication WO 01/89365 A2 henceforth "Mault").
- (a) As to claims 1 and 2, Mault discloses an activity monitor (600) for attachment to an entity/person, the monitor comprising:

a measurement unit including a plurality of motion sensors/body mounted accelerometers/muscle activity sensors/physiological sensors (24, 160, 602) operable to

produce respective sensor signals indicative of motion experienced thereby (figures 2, 13, 15; page 23, lines 7-13; page 24, lines 7-14; page 25, lines 7-10; page 27, lines 2-7); and

a processor (50, 610)/computing device operable to receive the sensor signals from the measurement unit and to process the signals in accordance with a predetermined method (figures 2, 3, 13, 15; page 23, lines 14-19; page 26, lines 2-10),

characterized in that the processor (50, 610)/computing device is operable to apply a correction calculation to the sensor signals, in order to remove external motion effects (e.g. automobile, elevator, etc.), on the entity/person to which the monitor is attached, from the sensor signals (figures 2, 3; page 28, lines 15-21).

- (b) As to claim 3, Mault discloses that the processor (50, 610)/computing device is operable to detect the presence of the external motion affects (e.g. automobile, elevator, etc.) and to apply the correction calculation upon detection of the external motion effects (page 28, lines 15-21).
- (c) As to claims 5 and 6, Mault discloses a method of monitoring activity of an entity/person using a plurality of motion sensors/body mounted accelerometers/muscle activity sensors/physiological sensors (24, 160, 602) which are operable to produce respective sensor signals indicative of motion experienced thereby (figures 2, 13, 15; page 23, lines 7-13; page 24, lines 7-14; page 25, lines 7-10; page 27, lines 2-7), the method comprising receiving sensor signals (122) and processing the signals in

accordance with a predetermined method (figures 2, 3, 4d; page 23, lines 14-19; page 26, lines 2-10), characterized by applying a correction calculation to the sensor signals in order to remove external motion effects (e.g. automobile, elevator, etc.) on the entity from the sensor signals (figures 2, 3, 14, 15; page 28, lines 15-21).

- (d) As to claim 7, Mault discloses monitoring (160) the external motion effects (e.g. automobile, elevator, etc.) and applying the correction calculation upon detection of the external effects (figure 4d; page 28, lines 15-21).
- 12. Claims 1, 2, 4-6 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Birnbach et al. (US Patent Application Publication 2002/0116080 A1 henceforth "Birnbach").
- (a) As to claims 1 and 2, Birnbach discloses an activity/user monitor (18) for attachment to an entity/individual, the monitor comprising:

a measurement unit including a plurality of motion sensors/"multiple one axis or two axis accelerometers" (10) operable to produce respective sensor signals indicative of motion experienced thereby (figures 1, 2; paragraphs 0045, 0047); and

a processor (20) operable to receive the sensor signals from the measurement unit and to process the signals in accordance with a predetermined method (figure 2; paragraphs 0046, 0048),

characterized in that the processor (20) is operable to apply a correction calculation to the sensor signals, in order to remove external motion effects (vehicular travel), on the entity/individual to which the monitor is attached, from the sensor signals (figure 5; paragraphs 0063, 0064).

- (b) As to claim 4, Birnbach discloses that the processor (20) is operable to receive an input (through "deactivation means" (24) such as a button or a switch) from a user indicating the presence of the external effects, and to apply the correction calculation upon receipt of the input (figure 2; paragraphs 0050, 0066).
- (c) As to claims 5 and 6, Birnbach discloses a method of monitoring activity of an entity/individual using a plurality of motion sensors/"multiple one axis or two axis accelerometers" (10) which are operable to produce respective sensor signals indicative of motion experienced thereby (figures 1, 2; paragraphs 0045, 0047), the method comprising receiving sensor signals and processing the signals in accordance with a predetermined method (figure 2; paragraphs 0046, 0048), characterized by applying a correction calculation to the sensor signals in order to remove external motion effects (vehicular travel) on the entity from the sensor signals (figure 5; paragraphs 0063, 0064).
- (d) As to claim 8, Birnbach discloses receiving an input (through "deactivation means" (24) such as a button or a switch) from a user indicating the presence of the

Art Unit: 2856

external motion effects, and applying the correction calculation upon receipt of the input (figure 2; paragraphs 0050, 0066).

#### Conclusion

13. The prior art made of record and not relied upon, cited in the attached 892 form, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samir M. Shah whose telephone number is (571) 272-2671. The examiner can normally be reached on Monday-Friday 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

مرکسی. Samir M. Shah Art Unit 2856 10/13/2006

> Megin &. Williams SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2800